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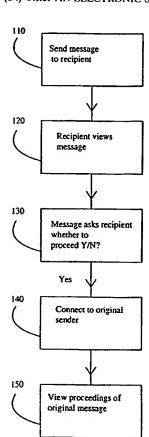
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(54) Title: AN ELECTRONIC SHORT MESSAGING AND ADVERTISING METHOD AND MEANS



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(57) Abstract: The invention relates to an electronic short messaging and advertising method and means. In particular the invention relates to an electronic advertising method, where minimal initiative is required from the consumer. Some embodiments of the invention may also be applied to an electronic sales method. The invention may be applied for normal short messaging also. The electronic short messaging and advertising method comprises at least one subscriber terminal and uses the Internet and/or the telephony network. With the method in accordance with the invention the recipient can receive advertisements or other short messages with the shortest manipulation time possible. No navigation, browsing of inboxes, copying and/or pasting of telephone numbers needs to be done. The user is shown the message automatically, and he may delete it or receive further information on it with one single press of a dedicated key.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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An electronic short messaging and advertising method and means

The invention relates to an electronic short messaging method and means, suitable for example for advertising. In particular the invention relates to an electronic advertising method, where minimal initiative is required from the consumer. Some embodiments of the invention may also be applied to an electronic sales method. The invention may be applied for normal short messaging also.

In prior art electronic advertising methods adverts are typically delivered by email or SMS messages. Emails may contain hyperlinks to advert sites. SMS messages may contain telephone numbers of advertisers.

The prior art has several disadvantages. The response to both types of adverts requires active participation from the consumer. A hyperlink needs to be identified and clicked. A telephone number needs to be entered to a mobile station by copying it from the SMS message or by entering it manually. The SMS advertiser typically wants to be contacted by telephone, because the user holds a telephone. The email advertiser wants the user to visit a URL address, because the user is by a computer.

The purpose of the invention is to remove the aforementioned disadvantages. The invention requires zero initiative from the user to respond to a short message or an advert. Whether the advert is communicated by SMS or email makes no difference to the referral.

Most or all of the aforementioned advantages of the invention are preferably implemented with a special exemplary embodiment of the invention, in which a message, like an email or an SMS message is sent to a subscriber terminal. Preferably, software on the subscriber terminal recognises the arrival of the email or SMS-message from a unique identifier. A part of the message displaying an advert is displayed to the screen of the subscriber terminal, like "New Pirelli tyres 100 dollars, interested Yes/No?" By pressing a dedicated key for "No" the message is deleted and the screen returns to the normal state. By pressing a dedicated key for "Yes" the subscriber terminal connects to an IP-address or an URL where the advertising is continued by displaying web pages, video and/or audio depicting the advertisement. Alternatively the subscriber terminal dials a telephone number to a sales representative. The subscriber terminal may also form a packet switched real time communication connection to a sales representative through the Internet.

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It is an object of the present invention to provide an electronic short messaging method for sending transmissions to at least one subscriber terminal via the Internet and/or the telephony network, which method is characterised in that it comprises the step of sending a first transmission to a recipient subscriber terminal for display, said first transmission defining two active alternatives: a first alternative for further action and a second alternative for deleting the transmission.

In one preferred embodiment, said first transmission defines automatic deletion after a predefined time period after reception unless one of the active alternatives is selected.

In another preferred embodiment, after a predefined period, a second transmission is sent to the recipient subscriber terminal unless the first alternative is selected, said second transmission removing the first transmission from display.

It is a further object of the present invention to provide a method for receiving electronic transmissions by at least one subscriber terminal using the Internet and/or the telephony network, which method is characterised in that it comprises the step of receiving a first transmission to a recipient subscriber terminal for display, said first transmission defining two active alternatives: a first alternative for further action and a second alternative for deleting the transmission.

In one preferred embodiment, said first transmission defines automatic deletion after a predefined time period after reception unless one of the active alternatives is selected.

In another preferred embodiment, after a predefined period, a second transmission is received to the recipient subscriber terminal unless the first alternative is selected, said second transmission deleting the first transmission.

It is still a further object of the present invention to provide an electronic short messaging device, comprising means for communicating using at least one packet switched connection and/or telephony network connection, at least one display, and associated software, the device being characterised in that, the associated software is arranged to identify incoming transmissions and display the content or some parts of the content to the display directly and/or at predetermined intervals. In addition to SMS messages or the like, said transmissions include also a dynamic stream or the like watching of which can be started before the end of the delivery. This shall be explained in more detail in the following detailed description of the invention.

In the following the invention will be described in greater detail with reference to exemplary embodiments in accordance with the accompanying drawings, in which

Figure 1 presents one favourable embodiment of the invention as a flow diagram.

Figure 2 presents a more general embodiment of the invention as a flow diagram.

5 Figure 3 presents a more developed embodiment of the invention as a flow diagram.

Figure 4 presents a more developed embodiment of the invention as a flow diagram.

Figure 5 presents a preferable embodiment of the inventive advertising means.

Some of the embodiments are also described in the dependent claims.

In phase 110 of figure 1 a message is sent to the recipient subscriber terminal typically by SMS (Short Message Service), SMS containing a bitmap, MMS (Multimedia Messaging Service) or email. In some preferable embodiments, the subscriber terminal is typically a PC computer, Apple Macintosh computer, a PDA (Personal Digital Assistant) or a UMTS-, GSM-, WAP-, Teldesic-, Inmarsat-, Iridium-, GPRS-, CDMA-, GPS- and/or WCDMA mobile station. Typically in some preferable embodiments, the subscriber terminal is a device using either the Microsoft Windows, Windows NT, Windows CE, Windows Pocket PC, GEOS, Palm OS or the Epoc operating system. In many preferable embodiments several default facilities of the operating system are used to realise the inventive method.

In some preferable embodiments all messages may be delivered to the same inbox. The recipient views the message from the inbox. The message will contain a referral like "Pirelli tyres 100\$, interested Y/N?, if yes please press X." Once the user presses X, or any other dedicated key depicted by the message, he is connected to the original sender of the message in phase 140. If he does something else, or nothing for some time, the message may be deleted or postponed.

- In some mobile device, there is a pair of key buttons for selecting the bioptional alternatives the normal operation of the mobile device involves. For example mobile telephones or PDAs have this kind of key button pairs. This pair of keys is advantageously used for selecting the bioptional alternatives of messages in accordance with the invention.
- A telephone connection may be formed automatically on the basis of the Caller ID. In some embodiments a hyperlink, IP address and/or URL address of the sender may

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be designated in the message and thus contacted through the Internet in accordance with the inventive method. In some preferable embodiments of the invention a popup function is defined in the message. Once the message is received it is instantly popped up on the subscriber terminal screen. For example in a smartphone containing two displays, like the Nokia Communicator, the message or some parts of it is popped up on both or either displays. In a PC, the message is popped on the screen once the messages have been downloaded. In a GSM mobile station the message or some parts of it are displayed in place of the operator or cell logo or both. In both preferable embodiments typically a software is required to identify the message, and pop it on the screen. In some preferable embodiments the software is able to identify embedded phone numbers, IP-addresses and/or URL addresses. Once "Yes" for the message is indicated, this aforementioned embedded directory information is read from the message and transferred to the communications part of the subscriber terminal.

After the user has been connected to the sender, he views, listens to and/or registers for proceedings in phase 150. In some preferable embodiments the proceedings may be a further advertisement on a web page, an audio and/or video presentation, a conversation with a sales representative and/or a registration for the receival of further information later by post, telephone, SMS and/or email.

In some preferable embodiments this is used to automate collect calls. If a person sends a message of the type: "Please call me Y/N?", the recipient may launch a collect call by one press of a dedicated key. In these preferable embodiments the arrival of the message typically launches a ring tone.

In some embodiments the method 10 is realised in a GSM network by sending a message in place of the operator logo on the terminal display. Alternatively SMS-CB (Cell Broadcast), USSD (Unstructured Supplementary Service Data), PDS (Packet Data on Signalling Channels) or WAPPush may be used to display the message directly on the screen. This message may contain instructions on an action to be taken if the logical response of the user is "Yes", for example it may contain a telephone number to which the user is connected, or it may trigger an SMS message from the user or a request for an SMS from the network or sender by USSD, SMS, or the like. A further message, linked to the original message of SMS, USSD, SMS-CB (Cell Broadcast) may be sent with the original message to contain these instructions in some embodiments.

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Upon any stage the network may also destroy or change the said message by sending another message. In one embodiment, for example if the position of the user changes, the HLR/VLR (Home/Visitor Location Register) or an external location server may prompt the network or an external messaging server to send a new message to update the message on the terminal screen, or to delete the message on the terminal screen. A necessary change of position may be for example leaving or entering a cell.

In figure 2 the message is sent to the recipient subscriber terminal in phase 210. The recipient views the message in phase 220. In addition to SMS or email, the message can be delivered by FTP, TCP/IP, H323, HTTP, UDP or by some other direct transfer protocol, and a "pop-up" software recognises the said transmissions or messages at the subscriber terminal.

In phase 230 the message provides the user with the option to proceed with further information related to the referral like "Pirelli tyres 100\$, interested Y/N? Please press Y to proceed!" If the user chooses to press the designated key, Y in this case, he is connected to a third party designated by the message in phase 240.

If he does something else or nothing for some time, the process is terminated and the message is deleted or postponed. In some preferable embodiments this is done by moving the message to the "Recycle bin" of the operating system of the subscriber terminal.

If the user chooses "Yes" by pressing a dedicated key or otherwise, he is connected to a third party designated by the message in phase 240. The message may have embedded phone numbers, IP-addresses, URL-addresses, ISDN-, FTP-, email-, SIP (Session Initiation Protocol)- addresses and/or other electronic directories to which the user is connected in some preferable embodiments.

After the user has been connected to the third party, he views, listens to, downloads, uploads and/or registers for proceedings in phase 250. In some preferable embodiments the proceedings may be a further advertisement on a web page, an audio and/or a video presentation, a conversation with a sales representative and/or a registration for the receival of further information later by post, telephone, SMS and/or email or a registration to a customer database for monitoring purposes.

In some embodiments the method 20 is realised in a cellular network by sending a message in place of the operator logo on the terminal display. Alternatively SMS-CB (Cell Broadcast), USSD, PDS (Packet Data on Signalling Channels) or

WAPPush may be used to display the message directly on the screen. This message may contain instructions on an action to be taken if the logical response of the user is "Yes", for example it may contain a telephone number to which the user is connected, or it may trigger an SMS message from the user or a request for an SMS from the network or sender by USSD, SMS, or the like. A further message, linked to the original message of SMS, USSD, SMS-CB (Cell Broadcast) may be sent with the original message to contain these instructions in some embodiments. In some embodiments this further message precedes the actual message and initialises the device to display the message directly on the screen. Typically a second transmission is sent and received and associated with the first transmission, depicting attributes related to user input, further actions and/or state of the first transmission or any other attributes or instructions.

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Upon any stage the network may also destroy or change the said message by sending another message. In one embodiment, for example if the position of the user changes, the HLR/VLR (Home/Visitor Location Register) or an external location server may prompt the network or an external messaging server to send a new message to update the message on the terminal screen, or to delete the message on the terminal screen. A necessary change of position may be for example leaving or entering a cell.

Especially when the first message is a USSD message, it is typical that the network, MSC, or an external server contains an USSD management application that administers the display, change and connection and/or response parameters of the messages on the user terminal displays.

In one embodiment the GSM terminal has dedicated software installed to run and administer the process of displaying messages. In one embodiment this software is realised as SIM Application Toolkit software on the SIM card of the mobile terminal, in another alternative embodiment it could be realised with a WAP-browser. This software recognises messages, for example SMS, SMS-CB, USSD, PDS or WAPPush messages that are sent to the terminal, and displays the bioptional messages to the user on the display. The recognition is typically done from a unique identifier associated with the message, for example in the header of the message. In some embodiments an initialisation message preceding the actual message may be used to set the terminal and associated software to a state where the incoming message(s) is displayed on the screen. If the user takes a dedicated action logically "Yes", the software will administer the proceedings.

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In phase 310 of figure 3 a transmission is sent to a recipient. The transmission may be a discrete message, but it may also be a continuous transmission and/or a real time transmission. Typically transmissions of this sort are realised by GPRS-, UMTS- FTP, TCP/IP, H323, HTTP, UDP or by some other direct data transfer protocol, and the said transmissions and/or messages are recognised at the subscriber terminal. The transmission may be a dynamic stream of e.g. IP-packets, or packets of any other protocol, and the reading and viewing of some of the packets may be begun even before the whole transmission has been received in some embodiments. In phase 320 the recipient views the transmission or some displayed parts of the transmission. In phase 330 the transmission or some parts of it are arranged to ask the recipient whether to proceed with further information. In some preferable embodiments, the user may be promised money for viewing the advert. In some embodiments the message is of the type: "New product X, interested Y/N? The phone bill/download is on us!" In some preferable embodiments, the message may be of the type: "New product X for 100\$, interested Y/N? You get 1\$ for viewing the advert!"

If "NO" the process is terminated and the message and/or transmission or some of its parts are deleted in phase 335. If "YES" the subscriber terminal automatically connects to a third party designated by the message. Any electronic address may be embedded in the transmission, in some preferable embodiments.

In phase 350 the bits transmitted and/or received and/or connected minutes are calculated. The calculation may be done by software at the subscriber terminal or in the network or both.

After the user has been connected to the third party, he views, listens to, downloads, uploads and/or registers for proceedings in phase 360. In some preferable embodiments the proceedings may be a further advertisement on a web page, an audio and/or a video presentation, a conversation with a sales representative and/or a registration for the receival of further information later by post, telephone, SMS and/or email or a registration to a customer database for monitoring purposes.

30 In some preferable embodiments, the phases 350 and 360 overlap or are conducted simultaneously.

In phase 365, money can be refunded to the recipient on the basis of bits transmitted and/or received and/or connected minutes. In some preferable embodiments, the amount of refund is based on the promise in the original message. In some

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preferable embodiments the refund is made to the phone bill of the recipient. In some preferable embodiments a cheque is posted to the owner of the subscriber terminal. In some preferable embodiments, the user is given a discount on the price, monthly fee, and/or per minute and/or per bit rate if the user accepts to receive adverts on a continuous basis.

Same options for deleting or updating transmission streams or associating transmission streams with each other exist as with discrete messages in accordance with the invention.

In the phase 410 of figure 4 a message is sent to a recipient. The recipient views the message in phase 420. In phase 430 the message asks whether the recipient wishes to proceed with the proposal. In some preferable embodiments the proposal may be of the form: "A single by Beatles, "Yesterday" 50 cents, Interested Y/N?" In some preferable embodiments the item to be sold is any data file, like a software program, movie in digital format, music in digital format, map in digital format, and/or any other document in digital format.

If "NO" the process is terminated and the message is deleted in phase 335. If "YES" the subscriber terminal automatically connects to a third party designated by the message. Any electronic address may be embedded in the message, in some preferable embodiments.

After the user has been connected to the third party, he views, listens to, downloads, uploads and/or registers for proceedings in phase 450.

In phase 460 the bits transmitted and/or received and/or connected minutes are calculated. The calculation may be done by a software at the subscriber terminal or in the network or both.

In phase 465, money can be charged from the recipient on the basis of bits transmitted and/or received and/or connected minutes. In some preferable embodiments, the charge is based on the price in the original message. In some preferable embodiments the charge is added to the phone bill of the recipient. In some preferable embodiments a bill is posted to the owner of the subscriber terminal. In some preferable embodiments the credit card numbers are automatically exchanged and the account is automatically debited to complete the purchase. In some preferable embodiments the credit card number of the subscriber is requested in a separate step of the proceedings.

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In some preferable embodiments the subscriber terminal is a mobile station, and the message is an SMS message. In some of these preferable embodiments the said message or some parts of the said message are displayed in the telephony network operator logo, and/or the network cell logo. In these embodiments the subscriber terminal is typically a GSM mobile station.

In many embodiments of the described inventive methods permutations of phases are possible and in accordance with the invention.

Figure 5 presents a preferable embodiment of the subscriber terminal in accordance with the invention. The subscriber terminal is typically a PC computer, Apple Macintosh computer, a PDA (Personal Digital Assistant) or a UMTS-, GSM-, WAP-, Teldesic-, Inmarsat-, Iridium-, GPRS-, CDMA-, and/or WCDMA mobile station. Typically in some preferable embodiments, the subscriber terminal is a device using either the Microsoft Windows, Windows NT, Windows CE, Windows Pocket PC, GEOS, Palm OS or the Epoc operating system. In many preferable embodiments several default facilities of the operating system are used to realise the inventive advertising means.

In some preferable embodiments the inventive subscriber terminal 500 comprises at least one packet switched connection 510 and/or telephony network connection 520, a display 550, at least one message inbox 540 and associated software 530.

The associated software 530 is arranged to recognise messages from the inbox 540. In some preferable embodiments of the invention there is a single inbox for SMS-messages, voicemail and emails. This is especially the case with inventive subscriber terminals running the Epoc operating system. However, the associated software 530 can monitor several inboxes on the subscriber terminal or in the telephony network or the Internet.

In some preferable embodiments the subscriber terminal is a PC computer, Apple Macintosh computer and/or a PDA (Personal Digital Assistant). In these preferable embodiments the pop-up software typically monitors the email inbox of the user on a server on the Internet or the inbox on the subscriber terminal or both. When a special email is sent to the inbox 540, it contains an identifying element that the pop-up software 530 can recognise. Once this identifying element is recognised, the message or some parts of it is popped to the monitor 550. In some preferable embodiments the message is displayed on the desktop of the computer. The message may read for example: "Pirelli tyres 100\$, interested Y/N?" In some preferable

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embodiments the user presses Y to connect to the party for further proceedings. If he presses N, or some other key, or does nothing for a predefined time, the message disappears and is deleted.

In some preferable embodiments the message is not delivered by email, but MMS is used instead. In some preferable embodiments it may be delivered directly to the subscriber terminal by FTP, TCP/IP, H323, HTTP, UDP or by some other direct transfer protocol, and the pop-up software recognises the said transmissions. In these embodiments the inbox is preferably not needed.

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In all or some of the embodiments the display of the advert may be enhanced by audio and/or video by the audio/video devices 590. In some preferable embodiments, the message is not deleted, but stored to the storage means 560. The storage means may be a hard drive, CD-ROM, computer disk, computer memory or any other electromagnetic storage means. In some preferable embodiments this is done by moving the message and/or transmission to the "Recycle Bin" of the operating system.

In some preferable embodiments the subscriber terminal is a WID (Wireless Information Device) that runs Epoc, Windows CE, Palm OS, GEOS, and/or Windows Pocket PC operating system. In some preferable embodiments the message and/or the transmission is delivered by MMS, SMS, email, by FTP, TCP/IP, H323, HTTP, UDP or by some other direct data transfer protocol, and the pop-up software recognises the said transmissions and/or messages. In some preferable embodiments the message or some parts of it are shown on at least one display of the smartphone by the pop-up software 530. In some preferable embodiments the pop-up software 530 is arranged to use several application engines of the operating system. For example in Epoc, the pop-up software may introduce a completely new messaging subsystem. In some preferable embodiments this is done simply by registering additional MTMs (Message Transfer Module). In Epoc, the MTMs are introduced by the Epoc Email app, which is arranged to support Internet mail SMTP, POP3, IMAP4, fax and SMS.

In some preferable embodiments there is at least one special MTM, which recognises the messages that should be popped to the display. In some preferable embodiments the messages are not necessarily adverts, but can be messages of any type.

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Typically smartphones have one phone display and one computer display. In some preferable embodiments the message or some parts of it are displayed in place of the telephony network operator logo, and/or the network cell logo, on the telephony display and/or on the computer display.

If the user is uninterested of the message, he may destroy it by pressing a key or by doing nothing for a predefined period. Once this option is realised the message is typically deleted and/or moved to the "Recycling bin."

The message typically embeds an electronic address, which can be contacted by a dedicated key if proceedings are desired. In some preferable Epoc embodiments of the invention several application engines, dial up, NIFMAN, Internet protocols like PPP or other, and/or Web app are used automatically to realise the communications connection to the said third party.

In some preferable embodiments the subscriber terminal is a GSM mobile station. In these preferable embodiments the inbox 540 is typically a SMS inbox. The pop-up software 530 is embedded in the code of the mobile station. Once the message, typically an SMS message, or transmission, typically a DTMF-tone or a FTP, TCP/IP, H323, HTTP, UDP or some other direct transfer protocol transmission via GSM data, is received the message or some parts of it are displayed on the display 550. In some preferable embodiments the message or some parts of it are displayed in place of the telephony network operator logo, and/or the network cell logo.

The message may read for example: "Pirelli tyres 100\$, interested Y/N?" In some preferable embodiments the user presses Y to connect to the party for further proceedings. If he presses N, or some other key, or does nothing for a predefined time, the message disappears and is deleted. In some embodiments indications may be changed, for example pressing # may indicate "Yes" in some preferable embodiments.

Once "Yes" has been indicated the subscriber terminal will dial a number embedded in the message, or open a data connection, like GSM-data to an IP address, URL address or any other electronic address.

In many of the presented embodiments after the user has been connected to the party designated in the message, he views, listens to and/or registers for proceedings. The party may be for example the caller, and contact can be made on the basis of Caller ID in some preferable embodiments. In some preferable embodiments the proceedings may be a further advertisement on a web page, an audio and/or video

presentation, a conversation with a sales representative and/or a registration for the receival of further information later by post, telephone, SMS and/or email.

In some preferable embodiments, the subscriber terminal is arranged to play a sound, a beep and/or ring tone for example, upon arrival of the message and/or transmission. In some preferable embodiments, the message and/or transmission may contain a ringtone, and/or a WAV- and/or an MP3- file, which is played at the recipient subscriber terminal. Alternatively in some embodiments the transmission may be arranged to trigger the playing of a particular file.

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In some preferable embodiments, the users can decline to accept incoming messages by a dedicated action that sends a signal to the network. In some preferable embodiments this disables all or some parts of the information exchange between the Home Location Register of the cellular network and third parties. In some preferable embodiments the user may invite incoming messages by enabling the network to transmit information from the Home Location Register to third parties.

In many preferable embodiments enabling and disabling are done by a dedicated signal recognised by the network. In some preferable embodiments the signal is an email, SMS and/or an MMS message and/or a transmission delivered by FTP, TCP/IP, H323, HTTP and/or UDP and/or the transmission is a DTMF tone or a phone call.

The invention has been explained above with reference to the aforementioned embodiments and several commercial and industrial advantages of the invention have been demonstrated. With the method in accordance with the invention the recipient can receive advertisements or other short messages with the shortest manipulation time possible. No navigation, browsing of inboxes, copying and/or pasting of telephone numbers needs to be done. The user is shown the message automatically, and he may delete it or receive further information on it with one single press of a dedicated key.

The invention has been explained above with reference to the aforementioned embodiments. However, it is clear that the invention is not only restricted to these embodiments, but comprises all possible embodiments within the spirit and scope of the inventive thought and the following patent claims.

Claims

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- 1. An electronic short messaging method for sending transmissions to at least one subscriber terminal via the Internet and/or the telephony network, characterised in that it comprises the step of,
- -sending a first transmission to a recipient subscriber terminal (210) for display, said first transmission defining two active alternatives: a first alternative for further action and a second alternative for deleting the transmission.
- 2. The method according to claim 1, **characterised** in that said first transmission defines automatic deletion after a predefined time period after reception unless the first alternative is selected.
 - 3. The method according to claim 1, characterised in that after a predefined period, a second transmission is sent to the recipient subscriber terminal unless the first alternative is selected, said second transmission removing the first transmission from display.
 - 4. The method according to claim 1, characterised in that a second transmission is sent and associated with the first transmission, depicting attributes related to user input, further actions and/or state of the first transmission.
- 5. A method for receiving electronic transmissions by at least one subscriber terminal using the Internet and/or the telephony network, characterised in that it comprises the step of,
 - -receiving a first transmission to a recipient subscriber terminal (210) for display, said first transmission defining two active alternatives: a first alternative for further action and a second alternative for deleting the transmission.
- 6. The method according to claim 5, characterised in that said first transmission defines automatic deletion after a predefined time period after reception unless the first alternative is selected.
- 7. The method according to claim 5, characterised in that after a predefined period, a second transmission is received to the recipient subscriber terminal unless the first alternative is selected, said second transmission removing the first transmission from display.

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- 8. The method according to claim 5, characterised in that a second transmission is received and associated with the first transmission, depicting attributes related to user input, further actions and/or state of the first transmission.
- 9. The method according to any of the preceding claims, **characterised** in that further action includes connecting to a telephone number, IP-address, URL-, or the like directory, sending a further subscriber originated message, requesting a call and/or registering for further information.
- 10. The method according to any of preceding claims, characterised in that at least one subscriber terminal is a PC computer, Apple Macintosh computer, a PDA
 10 (Personal Digital Assistant) and/or a UMTS-, GSM-, WAP-, Teldesic-, Inmarsat-, Iridium-, GPRS-, CDMA-, and/or WCDMA mobile station, and/or a device using either the Microsoft Windows, Windows NT, Windows CE, Windows Pocket PC, GEOS, Palm OS and/or the Epoc operating system.
- 11. A method according to any of preceding claims, characterised in that the bits transmitted and/or received and/or connected minutes are calculated, and the calculation is done by a software at the subscriber terminal or in the network or both.
 - 12. A method as claimed in any of preceding claims, characterised in that money is charged or refunded to the recipient on the basis of bits transmitted and/or received, connected minutes and/or price or promise in the original message.
 - 13. A method as claimed in any of preceding claims, characterised in that the said transmission is an MMS-, SMS-, SMS CB-, USSD-, PDS-, WAPPush message and/or an email, and is embedded with at least one phone number, IP-address, URL-addresses and/or other electronic directories to which the user is arranged to be connected.
 - 14. A method as claimed in any of preceding claims, characterised in that, the said transmission is an MMS-, SMS transmission and/or an email, DTMF-tone or a FTP, TCP/IP, H323, HTTP, UDP data transfer or some other direct data transfer and is embedded with at least one phone number, IP-address, URL-address, ISDN-, FTP-, email-, SIP (Session Initiation Protocol)- address(es) and/or other electronic directories to which the user is arranged to be connected.

- 15. A method as claimed in any of preceding claims, characterised in that the selection of an active alternative is indicated by pressing a dedicated key on the subscriber terminal.
- 16. A method as claimed in any of preceding claims, characterised in that the transmission or some parts of the transmission are displayed in place of the telephony network operator logo, and/or the network cell logo.
 - 17. A method as claimed in any of preceding claims, characterised in that the transmission or some parts of the transmission are popped up on at least one display of the subscriber terminal instantly or within a defined period upon arrival to the subscriber terminal.
 - 18. An electronic short messaging device, comprising
 - means for communicating using at least one packet switched connection (510) and/or telephony network connection (520),
 - at least one display (550), and
- associated software (530),
 - characterised in that the associated software is arranged to identify incoming transmissions and display the content or some parts of the content to the display (550) directly and/or at predetermined intervals defining two alternatives: a first alternative for further action and second alternatives for deleting the transmission.
- 20 19. The device according to claim 18, characterised in that, the associated software is arranged to display directly and/or at predetermined intervals the content or parts of the content of an incoming transmission defining two alternatives, a first alternative for further action and a second alternative for deleting the transmission, and the transmission is deleted or postponed after a predefined time period unless one of the active alternatives is selected.
 - 20. The device according to claim 18 or 19, characterised in that the associated software is realised as SIM Application Toolkit software on the SIM card of the mobile terminal.
- 21. The device according to claim 18 or 19, characterised in that the messaging means is a PC computer, Apple Macintosh computer, a PDA (Personal Digital Assistant) and/or a UMTS-, GSM-, WAP-, Teldesic-, Inmarsat-, Iridium-, GPRS-, CDMA-, and/or WCDMA mobile station, and/or a device using either the Microsoft Windows, Windows NT, Windows CE, Windows Pocket PC, GEOS, Palm OS and/or the Epoc operating system.

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- 22. The device according to claim 18 or 19, characterised in that the transmission is an MMS-, SMS message and/or an email, and is embedded with at least one phone number, IP-address, URL-address, ISDN-, FTP-, email-, SIP- address(es) and/or other electronic directories to which the user is arranged to be connected by a dedicated action.
- 23. Software program product, characterised in that it comprises
- -program code means for recognising a transmission,
- -program code means for displaying an bioptional message on the terminal display,
- -program code means for initiating proceedings in response to recognised first user input and
 - -program code means for removing the received transmission from display or postponing the display of the received transmission in response to recognised second user input or in absence of user input or on an external command.
- 24. A software program product according to claim 23, **characterised** in that, the associated software is realised as SIM Application Toolkit software on the SIM card of the mobile terminal, and/or as an USSD application on the network.

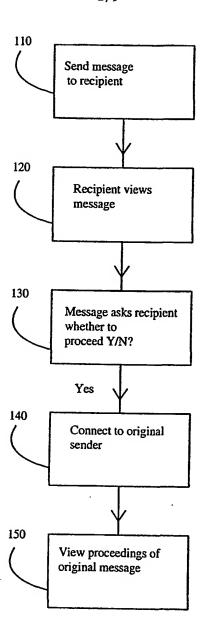
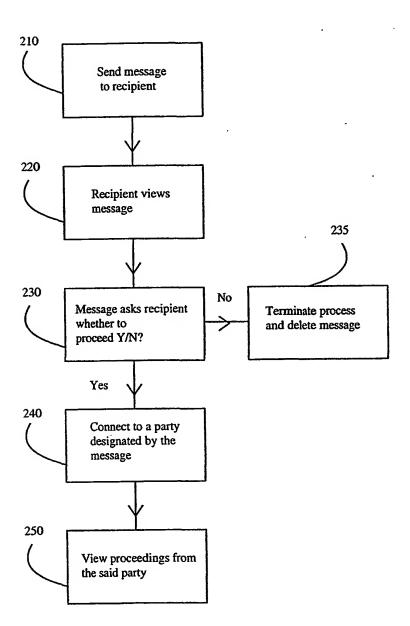


FIG 1.



FIĠ 2.

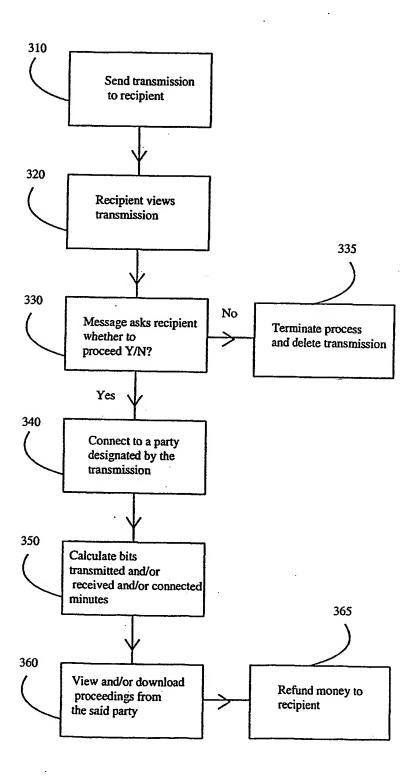


FIG 3.

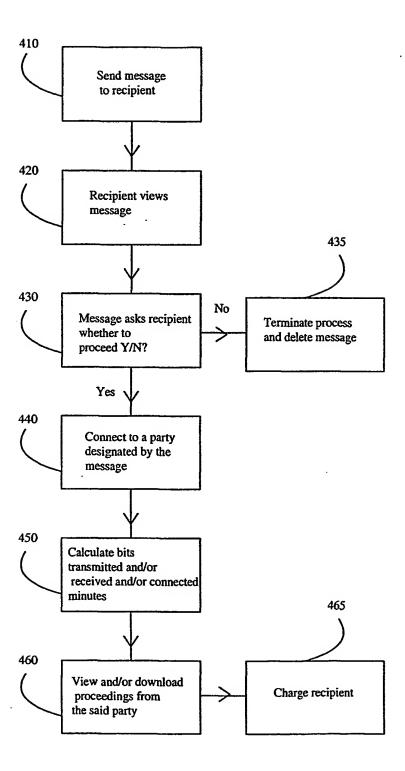


FIG 4.

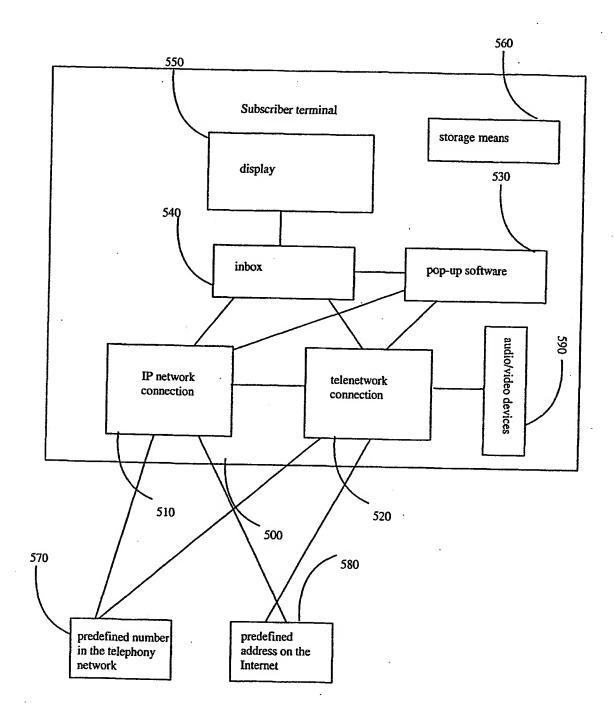


FIG 5.

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PCT/FI 01/00967 A. CLASSIFICATION OF SUBJECT MATTER IPC7: H04Q 7/22, G06F 17/60 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC7: H040, G06F Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched SE,DK,FI,NO classes as above Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Category* Citation of document, with indication, where appropriate, of the relevant passages Y WO 0062564 A1 (QUALCOMM INCORPORATED), 1,5,18,23 19 October 2000 (19.10.00), page 3, line 21 - page 5, line 11, abstract 2-4,6-17, A 19-22 Υ US 5852775 A (MURRAY HIDARY), 22 December 1998 1,5,18,23 (22.12.98), column 3, line 51 - column 4, line 8, abstract Α 2-4,6-17, 19-22 X Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "A" document defining the general state of the art which is not considered to be of particular relevance earlier application or patent but published on or after the international filing date "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "O" document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 0 1 -03- 2002 25 February 2002

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Swedish Patent Office

International application No.

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